



US006976329B1

(12) **United States Patent**
Foster

(10) **Patent No.:** **US 6,976,329 B1**
(45) **Date of Patent:** **Dec. 20, 2005**

(54) **ILLUMINATED SIGN UNIT**

(76) Inventor: **Jeffrey J. Foster**, 1676 Waterford Rd.,
Walworth, NY (US) 14568

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

(21) Appl. No.: **10/905,892**

(22) Filed: **Jan. 25, 2005**

(51) **Int. Cl.**⁷ **G09F 13/04**

(52) **U.S. Cl.** **40/572; 40/575; 40/611.06;**
362/812

(58) **Field of Search** 40/541, 564, 572,
40/575, 607.01, 607.05, 607.09, 611.06;
362/812, 183

(56) **References Cited**

U.S. PATENT DOCUMENTS

892,615 A 7/1908 Perry
1,348,957 A 8/1920 Pope

1,810,264 A	6/1931	Bonitz	
2,882,631 A	4/1959	Boone	
3,251,985 A	5/1966	Krupnick	
4,021,947 A	5/1977	Shneider	
D281,336 S	11/1985	Ahlgren	
4,623,073 A *	11/1986	Hansen	221/45
4,718,185 A *	1/1988	Conlin et al.	40/442
4,878,303 A	11/1989	Banniza et al.	
4,934,079 A	6/1990	Hoshi	
5,083,390 A	1/1992	Edman	
5,309,656 A *	5/1994	Montgomery	40/442
6,263,601 B1 *	7/2001	Emert	40/564

* cited by examiner

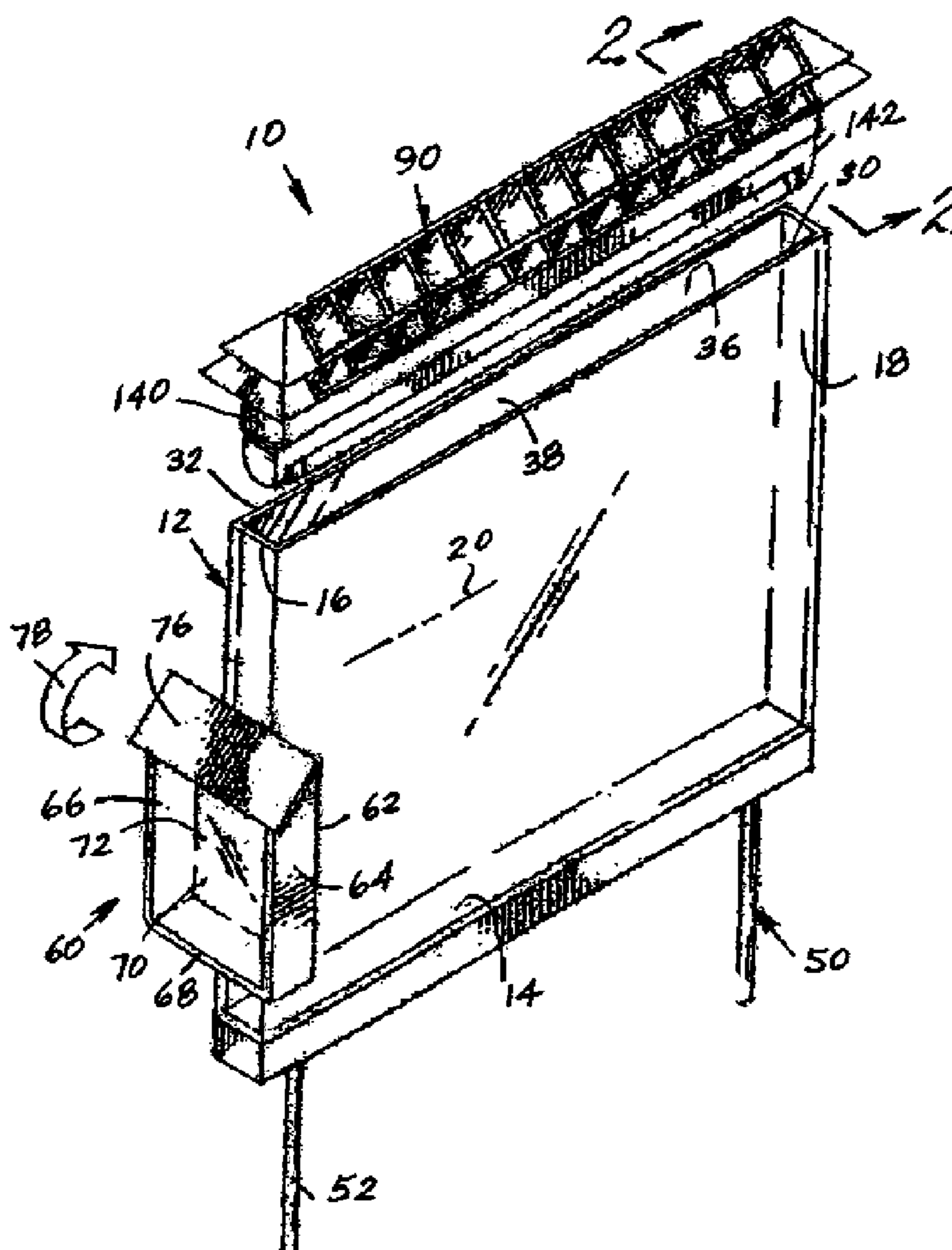
Primary Examiner—Brian K. Green

(74) *Attorney, Agent, or Firm*—Donald R. Schoonover

(57) **ABSTRACT**

A sign unit includes a translucent holder unit which has a solar-powered lighting unit supported thereon. A container is mounted on one side of the holder unit and is adapted to contain printed information. Anchor stakes support the holder unit.

2 Claims, 1 Drawing Sheet



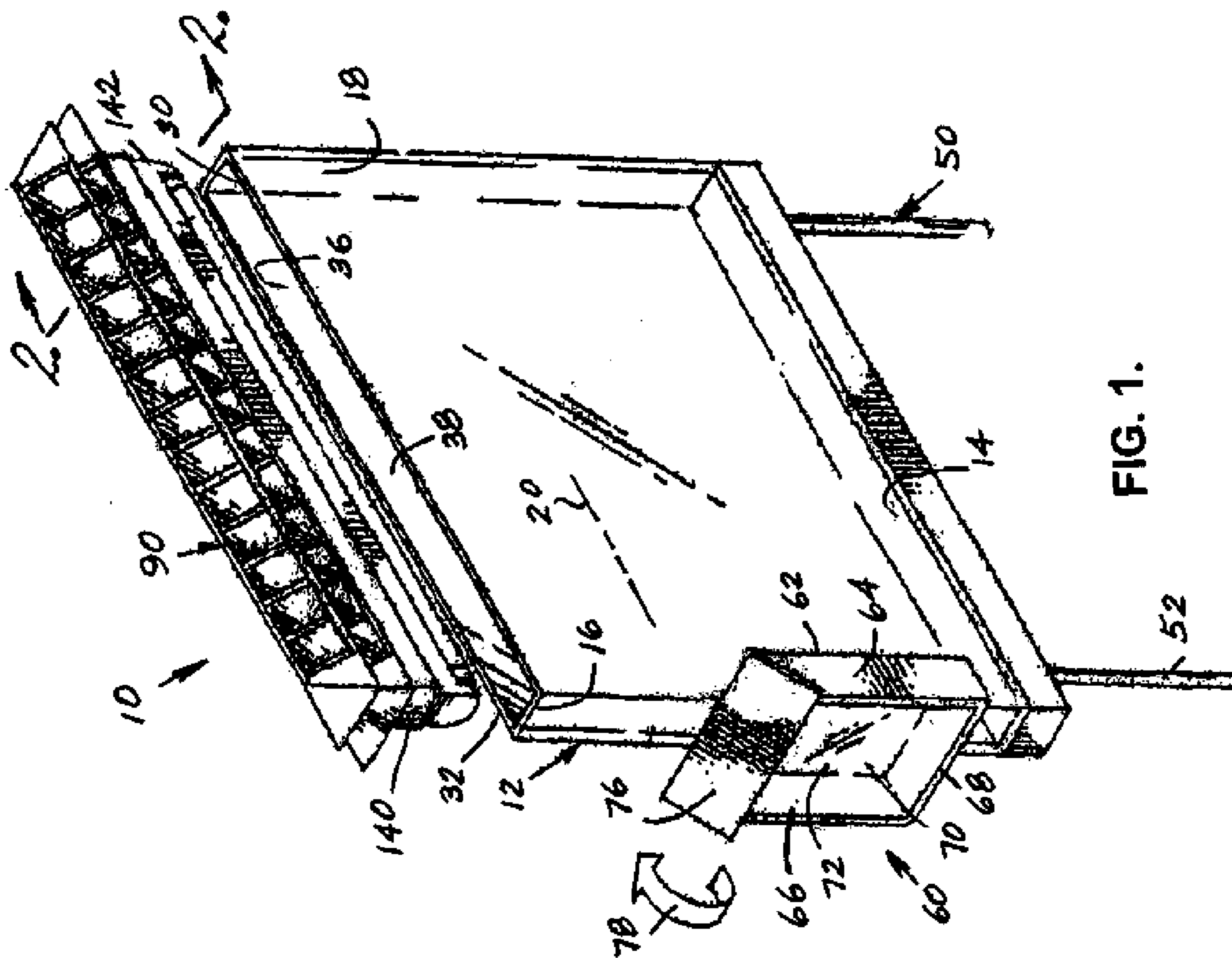


FIG. 1.

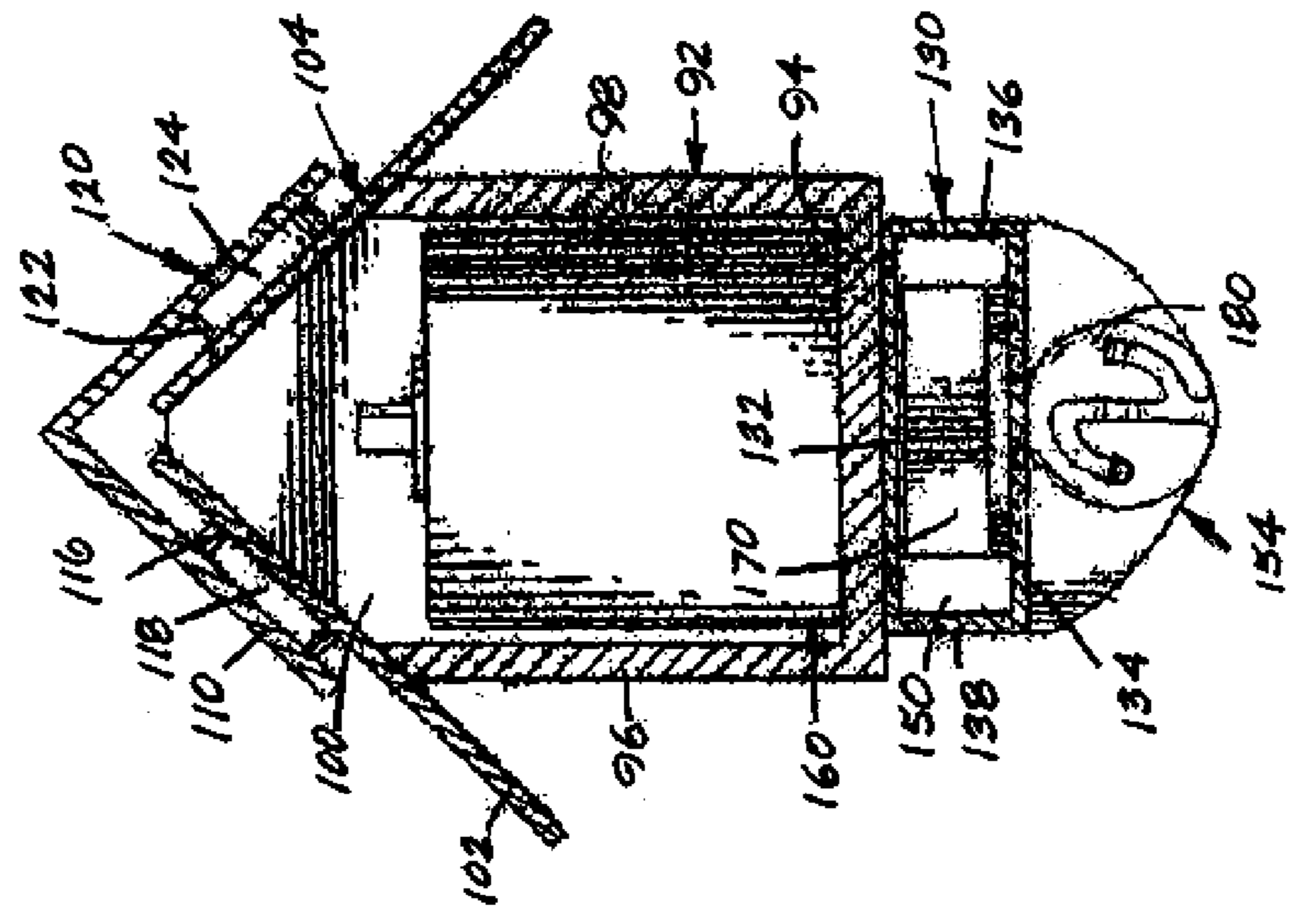


FIG. 2.

1**ILLUMINATED SIGN UNIT****BACKGROUND OF THE INVENTION**

The present invention relates to the general art of card, 5
picture or sign exhibiting, and to the particular field of
illuminated signs.

Many people conduct yard sales and want to notify people
passing by of the event, the times and dates, as well as
provide information regarding items that may be on sale. 10
Additionally, many small businesses like to advertise and
notify people passing by their store of sales, and the like.
Still further, many rental buildings wish to advertise rental
properties.

However, the inventor is not aware of any sign suitable for
providing such information for a small entity, such as an
individual or a small business. Heretofore, such small enti-
ties have had to resort to hand-written signs and small
posters to provide such information. 15

Therefore, there is a need for a sign that can be used by
a small entity to provide information to potential customers
regarding merchandise or services that may be provided by
the small entity. 20

Still further, some of these signs may be in poorly lighted
areas and thus may be difficult to see. This degraded
visibility may vitiate any advantages associated with the
sign. 25

Therefore, there is a need for a sign that can be used by
a small entity to provide information and will be visible even
in low light situations. 30

Still further, many small entities change their featured
items or services on a periodic basis. For example, a
restaurant may change its specials on a daily basis, or a store
may offer different items on different days of the week. Each
time an advertisement is changed, the signs must be
changed. This is difficult and onerous if special signs must
be printed up each time the advertisement is changed. In
some cases, parts of a pre-printed sign are simply deleted
and other parts added to the sign. This may degrade the
appearance of the sign. 35

Therefore, there is a need for a sign that can be used by
a small entity to provide information and which can be easily
and quickly changed without degrading the presentation of
the sign. 40

Some signs are simply taped to a window. After awhile,
the tape may dry out or may leave marks on the support after
the sign has been removed. 45

Therefore, there is a need for a sign that can be used by
a small entity to provide information and which will not
require tape or other such products to support the sign in
place. 50

PRINCIPAL OBJECTS OF THE INVENTION

It is a main object of the present invention to provide a
sign that can be used by a small entity to provide information
to potential customers regarding merchandise or services
that may be provided by the small entity. 55

It is another object of the present invention to provide a
sign that can be used by a small entity to provide information
and will be visible even in low light situations. 60

It is another object of the present invention to provide a
sign that can be used by a small entity to provide information
and which can be easily and quickly changed without
degrading the presentation of the sign. 65

2

It is another object of the present invention to provide a
sign that can be used by a small entity to provide information
and which will not require tape or other such products to
support the sign in place.

SUMMARY OF THE INVENTION

These, and other, objects are achieved by an illuminated
sign unit that includes a translucent holder unit which will
accommodate materials to be displayed and which has an
open top end. A solar powered lighting unit fits on the open
top unit to provide lighting to the interior of the holder unit.
A storage container is mounted on one side of the holder unit
and anchor stakes are fixed to the bottom end of the holder
unit. 15

Using the illuminated sign unit embodying the present
invention will permit a small entity, such as an individual, to
display information in a highly visible manner and to
quickly and easily change that information as needed. The
sign unit can be securely mounted in the ground and thus
will not require tape or other such adhesive materials. 20

**BRIEF DESCRIPTION OF THE DRAWING
FIGURES**

FIG. 1 is a perspective view of an illuminated sign unit
embodying the present invention. 25

FIG. 2 is a view taken along line 2—2 of FIG. 1.

**DETAILED DESCRIPTION OF THE
PREFERRED EMBODIMENT**

Other objects, features and advantages of the invention
will become apparent from a consideration of the following
detailed description and the accompanying drawings. 35

Referring to the Figures, it can be understood that the
present invention is embodied in an illuminated sign unit **10**
that achieves the above-stated objectives.

Unit **10** comprises a holder unit **12** in which display
material is located. The display material can include adver-
tisements, and the like, and can be changed as needed. 40

Holder unit **12** includes a first end wall **14** which is a
bottom end wall when holder unit **12** is in use, a first side
wall **16**, a second side wall **18**, and a transverse axis **20**
which extends between first side wall **16** and second side
wall **18**. 45

A first translucent wall **30** is formed of translucent plastic
or glass, or the like, and is mounted on first end wall **14** and
on the first and second side walls **16**, **18**.

A second translucent wall **32** is mounted on first end wall
14 and on the first and second side walls **16**, **18** and is spaced
apart from first translucent wall **30** to define a gap **36**
between the first and second translucent walls **30**, **32** and
between the first and second side walls **16**, **18**. 50

An open end **38** is a top end when holder unit **12** is in use. 55

Two anchor stakes **50** and **52** are fixedly attached to first
end wall **14** and are used to support unit **12** in place. Anchor
stakes **50**, **52** are generally legs that are forced into the
ground, but can be any suitable support element as will
occur to those skilled in the art based on the teaching of this
disclosure. 60

A container unit **60** is mounted on first side wall **16** and
is used to contain literature that is associated with the goods
or services being advertised by unit **10**.

Container unit **60** includes a first wall **62** which is a rear
wall and which is fixedly mounted on first end wall **16** when
container unit **60** is in use, a first side wall **64** which is 65

located adjacent to first translucent wall **30** when container unit **60** is in use, a second side wall **66** which is located adjacent to second translucent wall **32** when container unit **60** is in use, and an end wall **68** which is a bottom wall when container unit **60** is in use.

Container unit **60** further includes a translucent wall **70** which is fixed to the first and second side walls **64**, **66** and to the end wall **68** of container unit **60** and which is spaced apart from first wall **62**. A gap **72** is defined between the first and second side walls **64**, **66** and the end wall **68** of container unit **60** and accommodates the literature stored in container unit **60**.

A cover element **76** is pivotally mounted on first wall **62** to span gap **72** defined in the container unit **60**. Cover element **76** is mounted on wall **62** by hinges, or the like, to move in direction **78** to open or close the container unit **60** as needed to dispense the material stored therein.

A lighting unit **90** is releasably supported on holder unit **12** adjacent to open end **36** of the holder unit **12** and provides light so any material displayed in holder unit **12** can be easily seen even in difficult lighting situations.

Lighting unit **90** includes a housing **92** having a first end **94** which is a bottom end when lighting unit **90** is in use, a first wall **96** mounted on first end **94**, and a second wall **98** mounted on first end **94**. Second wall **98** is spaced apart from first wall **96**. A gap **100** is defined between the first and second walls **96**, **98** of the housing **92**.

Housing **92** further includes a first roof panel **102** mounted on first wall **96** and a second roof panel **104** mounted on second wall **98**.

A first solar panel **110** is mounted on first roof panel **102** by mounting elements **116**, and a vent gap **118** is defined between roof panel **102** and solar panel **110**.

A second solar panel **120** is mounted on second roof panel **104** by mounting elements **122**, and a vent gap **124** is defined between roof panel **104** and solar panel **120**.

An enclosure unit **130** is mounted on first end **94** of housing **90** and includes a first wall **132** fixedly mounted on first end wall **94** of the housing **92**, a second wall **134** spaced apart from first wall **132** of the enclosure unit **130**, a first side wall **136**, and a second side wall **138**. Enclosure unit **130** further includes a first end wall **140** and a second end wall **142**. A hollow interior volume **150** is defined by the first wall **132**, the second wall **134**, the first side wall **136** and the second end wall **142** of the enclosure unit **130**.

Light fixture mounting flanges, such as light fixture mounting flange **154**, are fixedly mounted on second wall **134** of the enclosure unit **130**. The light fixture mounting flanges **154** are located in gap **36** defined between the first and second side walls **16**, **18** of holder unit **12** when enclosure unit **130** is in use.

Lighting unit **90** is used by placing it on top of holder unit **12** as indicated in FIG. 1 so it is abuttingly supported on holder unit **12**.

A rechargeable battery **160** is located in gap **100** and is electrically connected to the first and second solar panels **110**, **120** in a manner known to those skilled in the art to be recharged by the solar panels **110**, **120**.

An electric converter **170** is located in hollow interior **150** defined in the enclosure unit **130** and is electrically connected to the rechargeable battery **160** to convert power from the battery **160** into power that can be used by lighting elements included with unit **10**.

A light element **180** is mounted on the light fixture mounting flanges **154** and is electrically connected to electric converter **170** to be powered thereby. Light element **180** is located in gap **36** defined between the first and second side

walls **16**, **18** and the end wall **14** of the holder unit **12** when the enclosure unit **130** is in use.

Use of unit **10** can be understood from the teaching of the foregoing disclosure and thus will not be discussed in detail. Material, such as billboard-type material is inserted into holder unit **12** and brochures or like literature is inserted into container unit **60**. Lighting unit **90** is then placed on top of holder unit **30** and activated, using an on/off switch, or the like. Power from battery **160** will activate light element **180** which is located and positioned to illuminate any material in holder unit **12**. Battery **160** is recharged by a circuit which includes solar panels **110** and **120**.

It is to be understood that while certain forms of the present invention have been illustrated and described herein, it is not to be limited to the specific forms or arrangements of parts described and shown.

What is claimed is:

1. An illuminated sign unit comprising:

(a) a holder unit which includes

- (1) a first end wall which is a bottom end wall when said holder unit is in use,
- (2) a first side wall,
- (3) a second side wall,
- (4) a transverse axis which extends between the first side wall and the second side wall,
- (5) a first translucent wall mounted on the first end wall and on the first and second side walls,
- (6) a second translucent wall mounted on the first end wall and on the first and second side walls and which is spaced apart from the first translucent wall to define a gap between the first and second translucent walls and between the first and second side walls, and
- (7) an open end which is a top end when said holder unit is in use;

(b) two anchor stakes fixedly attached to the first end wall of said holder unit;

(c) a container unit mounted on the first side wall and including

- (1) a first wall which is a rear wall and which is fixedly mounted on the first end wall of said holder unit when said container unit is in use,
- (2) a first side wall which is located adjacent to the first translucent wall of said holder unit when said container unit is in use,
- (3) a second side wall which is located adjacent to the second translucent wall of said holder unit when said container unit is in use,
- (4) an end wall which is a bottom wall when said container unit is in use,
- (5) a translucent wall which is fixed to the first and second side walls and to the end wall of said container unit and which is spaced apart from the first wall of said container unit, a gap being defined between the first and second side walls and the end wall of said container unit, and
- (6) a cover element pivotally mounted on the first wall of said container unit to span the gap defined in said container unit; and

(d) a lighting unit which is releasably supported on said holder unit adjacent to the open end of said holder unit and which includes

(1) a housing having

- (A) a first end which is a bottom end when said lighting unit is in use,
- (B) a first wall mounted on the first end of the housing,

5

- (C) a second wall mounted on the first end of the housing, the second wall being spaced apart from the first wall of the housing to define a gap between the first and second walls of the housing,
- (D) a first roof panel mounted on the first wall of the housing, 5
- (E) a second roof panel mounted on the second wall of the housing,
- (F) a first solar panel mounted on the first roof panel of the housing, 10
- (G) a second solar panel mounted on the second roof panel of the housing,
- (H) an enclosure unit mounted on the first end of the housing and which includes a first wall fixedly mounted on the first end of the housing, a second wall spaced apart from the first wall of the enclosure unit, a first side wall, a second side wall, a first end wall and a second end wall, a hollow interior volume being defined by the first wall, the second wall, the first side wall and the second end wall of the enclosure unit, and 15 20
- (I) a light fixture mounting flange fixedly mounted on the second wall of the enclosure unit, the light fixture mounting flange being located in a gap

6

- defined between the first and second side walls and the end wall of said holder unit when said enclosure unit is in use,
 - (2) a rechargeable battery located in the gap between the first and second walls of the housing, and which is electrically connected to the first and second solar panels,
 - (3) an electric converter located in the hollow interior volume defined in the enclosure unit and which is electrically connected to the rechargeable battery, and
 - (4) a light element mounted on the light fixture mounting flange and which is electrically connected to the electric converter and which is located in the gap defined between the first and second side walls and the end wall of said holder unit when said enclosure unit is in use.
2. The illuminated sign unit as described in claim 1 further including mounting elements mounting the solar panels to the roof panels of said housing, and wherein the solar panels are spaced apart from the roof panels to define vents.

* * * * *